



Values:

SAFETY
TEAMWORK
INTEGRITY
EFFICIENCY
EFFECTIVENESS
RESPONSIVENESS

Sandy City Public Utilities 2015 Water Quality Report

*Proudly working together to
provide quality utility
services for our customers.*



Paradise Valley Well
Drilled - 03/12/2003
Pumps - 2,100 gallons per minute
3,024,000 gallons a day

MESSAGE

IMPORTANT FACTS ABOUT YOUR DRINKING WATER

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.



Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791

Small Canyon Well
Drilled - 06/21/1962
Pumps - 450 gallons per minute
648,000 gallons per day

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Sandy City is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Groundwater & Surface Water

Water Quality Report

Sandy City has two main sources that supply our drinking water : surface water from Metropolitan Water District of Salt Lake and Sandy, which is taken from Little Cottonwood Creek and Deer Creek Reservoir. And currently seventeen City wells that pump groundwater from underground aquifers. The wells generally only operate during the summer months. For more information, contact Mike Campbell at (801) 352-4400.

EPA requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water.

2015				Sandy City		MWDSLs Plant		Most Likely Source
				Wells		Finished Water		
Contaminants	MCLG	MCL	Units	Ground Water	Year	Surface Water	Year	
PRIMARY INORGANIC								
ARSENIC	N/A	0.01 mg/l	mg/L	0.0005 - 0.0015	2012			Erosion of naturally occurring deposits.
BARIUM	2 mg/L	2 mg/L	mg/L	0.096 - 0.362	2015	0.0537	2012	Erosion of naturally occurring deposits.
CHROMIUM	0.1 mg/L	0.1 mg/L	mg/L			0.0077	2012	Erosion of naturally occurring deposits.
FLUORIDE	4.0 mg/L	4.0 mg/L	mg/L	0.2 - 0.9	2015	0.245 - 0.796	2015	Erosion of naturally occurring deposits and additional to meet regulations.
MERCURY	0.002 mg/l	0.002 mg/L	mg/L	0.0002	2012			Erosion of naturally occurring deposits.
NITRATE	10 mg/L	10 mg/L	mg/L	0.8 - 3.8	2013	0.121 - 0.329	2014	Runoff from fertilizer, leaching from septic tanks and naturally occurring organic material
SELENIUM	0.05 mg/L	0.05 mg/L	mg/L	0.0009 - 0.0020	2013			Erosion of naturally occurring deposits.
SODIUM	UR	UR	mg/L	14.7 - 54.6	2010	23.3	2012	Erosion of naturally occurring deposits and runoff from road deicing
SULFATE	NE	1000 mg/L	mg/L			13.5 - 55.0	2015	Erosion of naturally occurring deposits.
TOTAL DISSOLVED SOLIDS		2000 mg/L	mg/L	238 - 508	2014	120 - 292		Erosion of naturally occurring deposits.
TURBIDITY	Ground	5.0 NTU	NTU	0.07 - 0.30	2013			Soil runoff
	Surface	0.5 NTU	NTU			0.019 - 0.132	2014	Soil runoff
BIOLOGICAL CONTAMINANTS								
FECAL COLIFORM & E COLI TOTAL COLIFORM	>5%	0	NA	0	2015	0	2015	MCL for monthly compliance. No violations were issued. Human & animal fecal waste, naturally occurring in environment.
RADIOACTIVE CONTAMINANTS								
ALPHA EMITTERS	NE	15 pCi/L	pCi/L	3.8 - 9.7	2011			Erosion of natural deposits
BETA/PHOTON EMITTERS	NE	4 millirem/	pCi/L	4.4 - 14.0	2014			Decay of natural and man-made deposits
RADIUM 226	NE	5 pCi/l	pCi/L	0.15 - 0.34	2014			Decay of natural and man-made deposits
RADIUM 228	NE	5 pCi/L	pCi/L	0.13 - 1.7	2012			Decay of natural and man-made deposits
URANIUM	NE	0.030 mg/L	mg/L	0.0095 - 0.0282	2010			Erosion of natural deposits
PESTICIDES & HERBICIDES								
	Various	Various		ND	2015	ND	2015	Various Sources
VOLATILE ORGANIC CHEM.								
Bromodichloromethane	NE	NE	mg/L	0.0015	2015	0.0041 - 0.0099	2015	By-product of drinking water disinfection
Chlorodibromomethane	NE	NE	mg/L	0.0007	2015	0.0005 - 0.0029	2015	By-product of drinking water disinfection
TETRACHLOROETHYLENE	0 mg/L	0.005 mg/l	mg/L	0.0011	2014			Improper disposal of dry cleaning and other solvents
Chloroform	NE	NE	mg/L	0.0007 - 0.003	2015	0.0044 - 0.0273	2015	By-product of drinking water disinfection

2015				Sandy City		MWDSLs Plant		
				Wells		Finished Water		
Contaminants	MCLG	MCL	Units	Ground Water	Year	Surface Water	Year	Most Likely Source
SECONDARY INORGANIC								
CHLORIDE	NE	250 mg/l	mg/L			22.6 - 66.3	2014	Erosion of naturally occurring deposits.
pH	NE	6.5-8.5	unites			8.06 - 8.31	2015	Naturally Occurring
ORGANIC MATERIAL								
TOC	UR	NE	ug/L			1.77 - 2.53	2015	Naturally Occurring
DOC	UR	NE	ug/L			2.03 - 2.72	2015	Naturally Occurring
UV-254	UR	NE	cm-1			0.013 - 0.030	2013	Naturally Occurring
DISINFECTION-BY-PRODUCT								
THM'S (Total Trihomethanes)	NE	80 ug/L	ug/L	19.20 - 61.60	2015	21.7 - 52.6	2015	By-product of drinking water disinfection
Total Haloacetic Acids (HAA5)	NE	60 ug/L	ug/L	6.80 - 23.40	2015	18.8 - 51.3	2015	By-product of drinking water disinfection
Total Haloacetic Acids (HAA6)	NE	60 ug/L	ug/L			22.7 - 54.3	2015	By-product of drinking water disinfection
Lead and Copper								
Lead	NE	*AL = 15	ug/L	29.4 - 961	2013			Corrosion of household plumbing system
Copper	NE	*AL = 1300	ug/L	0.7 - 6.4	2013	0.134	2012	Corrosion of household plumbing system

Inadequately treated water(surface water) may contain disease-causing organisms. These organisms include bacteria, viruses and parasites which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

In the upper tables you will find many terms and abbreviations you might not be familiar with.
Definitions listed below

DEFINITIONS FOR TABLE OF CONTAMINANTS:

- ND** – Non-detects-Laboratory analysis indicates that the constituent is not present.
- mg/L** - Milligrams per liter or parts per million (ppm) – one part per million corresponds to one minute in two (2) years, or a single penny in \$10,000.
- ug/L** -Micrograms per liter or parts per billion (ppb) – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- PPT** – Parts per trillion or nanograms per liter (nanograms/l) – one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- pCi/L** – picocuries per liter – picocuries per liter is a measure of the radioactivity in water.
- NTU** – Nephelometric Turbidity Unit – Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- AL** – Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- TT** – Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- MCL** – Maximum Contaminant Level – The highest level of contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology.
- MCLG** – Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is not known or expected risk to health. **MCLG’s** allow for a margin of safety.
- NE** – Not established.
- UR** – Unregulated.
- Range** – Range of measurements based on testing of Sandy City sources.
- (a)** The MCL for beta particles is 4 mrem (millirems) per year. EPA considers 50 pCi/L to be the level of concern for beta particles

Prevention & Protection

Source Protection

Sandy City's primary water sources are surface water provided by Little Cottonwood Treatment Plant and our precious groundwater. Our source protection program was implemented to **protect, preserve and maintain** those sources in order to safeguard the welfare of City residents and visitors.

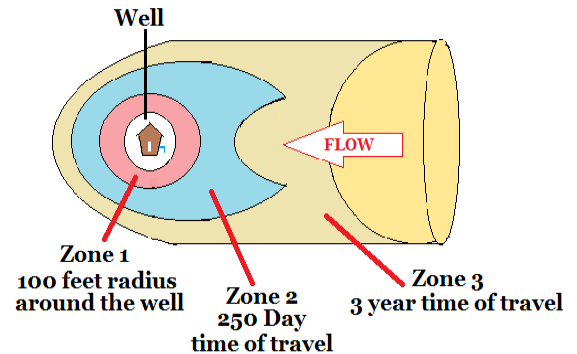
Groundwater can be effected by what is happening above ground.

Wells (groundwater) have source protection zones

All of our wells are water table wells sitting in an unconfined aquifer. Precipitation of any kind - rain, snow, sleet or hail seeps thru the ground and filters itself thru gravel and rocks before entering our water storage (**The Aquifer**).

The same cycle would happen with potential contaminates - chemicals or hazardous materials would seep into our groundwater. The illustration shows the source protection zones around a wells.

Sandy City has ordinances in place to help protect those zones from possible contaminants.



Backflow

Cross Connection Control and Backflow Prevention

Sandy City Public Utilities is committed to providing our customers with a clean, safe supply of drinking water and protecting its quality. Our goal is to help protect our valuable drinking water resources by providing public awareness and education to you and our drinking water customers on how to prevent contamination and pollution through unprotected cross connections to our important and necessary drinking water supply.

What is a Cross Connection?

A cross-connection is any temporary or permanent connection between a public water system and **anything else**, such as any source or system containing nonpotable water, gases, liquids or other substances.

What is Backflow?

Backflow is the undesirable reversal of flow of water or nonpotable water or gases, liquids and other substances through a cross-connection and into the piping of a public water system or consumer's potable water system. Backflow is caused by two types of conditions. One condition is called backpressure, where the pressure on the customers side becomes higher than the water systems water pressure and may force the water to reverse direction. Another condition, backsiphonage, occurs when there is a drop in the supply pressure of the water system, due to a water line break or fighting a fire. This creates a vacuum which may pull or siphon the contaminants or pollutants back into the drinking water supply.

Backflow Prevention

All facilities, commercial or residential, do have at least one potential or actual cross connection. Cross connections are allowed, provided they have proper protection against backflow. The customer's responsibility is to protect cross connections against backflow by installing and maintaining backflow prevention devices and assemblies. These devices and assemblies insure that the water flows in one direction, and doesn't allow for pollutants or contaminants to flow back into the drinking water supply.



Who can help to conserve our water? You can. It takes all of us making an effort to make conservation of our water possible.



What you can do to conserve our water:

Visit our website for indoor and outdoor water conservation tips at:
Sandy.utah.gov/segolilygardens

Visit Sego Lily Gardens—1472 E Sego Lily Drive. This is Sandy City's Water Conservation Demonstration Garden that is FREE to the public. You can see ways to use water wise plants and irrigation systems for a beautiful waterwise landscape and learn from our staff.

Get a free water audit of your landscape:
Call 1-877-SAVE-H2O for a free audit of your sprinkler system with suggestions for needed adjustments.



When should you start?

Now! It's never too late.

How are Our Annual Water Quality Reports/Consumer Confidence Reports Distributed?

In an effort to be more cost effective and efficient, Sandy City's Annual Water Quality Report will be distributed electronically via the web starting July 2015. You can view this report now and in the future at: sandy.utah.gov/waterqualityreport

This report will not be mailed to your home unless you contact us with your name and full mailing address. This can be done by contacting our Public Utilities Department at (801) 352-4400.

Visit sandy.utah.gov/stormwater for more information and ways that you can help protect our waters. **We All Live Downstream.**

